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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/042,157	01/11/2002	Teruo Ouchi	P21597	5804

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RESTON, VA 20191

EXAMINER

FLANAGAN, BEVERLY MEINDL

ART UNIT	PAPER NUMBER
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3739

DATE MAILED: 11/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/042,157

Applicant(s)

OUCHI, TERUO

Examiner

Beverly M Flanagan

Art Unit

3739

-- Th MAILING DATE of this communication appears on the cover sheet with th correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

BEVERLY M. FLANAGAN  
PRIMARY EXAMINER

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.

- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_

## DETAILED ACTION

### *Priority*

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotmel et al. (U.S. Patent No. 6,585,639) in view of Ouchi (U.S. Patent No. 4,784,464).

**In regard to claims 1 and 3**, Kotmel et al. teach a bronchoscope 14 with an elongate flexible body 16 and having an outside diameter in the range of 1.5 to 8 mm, which results in an outer cross-sectional area of 1.767 mm<sup>2</sup> to 50.265 mm<sup>2</sup> (see Figure 1 and col. 8, lines 40-55). Kotmel et al. also teach various embodiments of the bronchoscope 14 provided with a plurality of components, including a working channel 44, an optical viewing bundle 40 and an illumination bundle 42 (see Figures 2A and 2B, and col. 9, lines 10-17). Kotmel et al. also teach that the outer diameter of working channel 44 is in the range of 0 to 2.8 mm, which results in an outer cross-sectional area of 0 mm<sup>2</sup> to 6.158 mm<sup>2</sup> (see col. 8, lines 40-55). Kotmel et al. are silent as to the diameter of the optical viewing bundle 40 and the illumination bundle 42 (see Figure 2A). However, Ouchi discloses image transmitting optical fiber bundles 10 and

illuminating optical fiber bundles 20 that have diameters ranging from 1 mm to 3 mm (see col. 3, lines 20-65 and col. 4, lines 1-55). Ouchi thus demonstrates that optical and illuminating fiber bundles with diameters of 1 to 3 mm are well known in the art. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to form the optical viewing bundle 40 and illumination bundle 42 of Kotmel et al. with a diameter in the range of 1 to 3 mm. Assuming the following data for the fiberscope of Kotmel in view of Ouchi:

	<u>Diameter</u>	<u>Cross-section</u>
Fiberscope	6.5 mm	33.183 mm <sup>2</sup>
Working channel	2.8 mm	6.158 mm <sup>2</sup>
Optical viewing bundle	2.8 mm	6.158 mm <sup>2</sup>
Illuminating fiber bundle	2.8 mm	6.158 mm <sup>2</sup>

The sum of the cross-sections of the components is 18.474 mm<sup>2</sup>. Dividing this sum by the cross-section of the fiberscope (18.474/33.138) yields 0.556. Thus, the fiberscope of Kotmel et al. in view of Ouchi satisfies the relationship of  $0.5 \leq \Sigma s/S \leq 0.6$ . **With further regard to claim 3**, assuming the following data for the fiberscope of Kotmel in view of Ouchi:

	<u>Diameter</u>	<u>Cross-section</u>
Fiberscope	6.4 mm	33.183 mm <sup>2</sup>
Working channel	2.8 mm	6.158 mm <sup>2</sup>
Optical viewing bundle	2.8 mm	6.158 mm <sup>2</sup>
Illuminating fiber bundle	2.8 mm	6.158 mm <sup>2</sup>

The sum of the cross-sections of the components is  $18.474 \text{ mm}^2$ . Dividing this sum by the cross-section of the fiberscope ( $18.474/32.170$ ) yields 0.574. Thus, the fiberscope of Kotmel et al. in view of Ouchi satisfies the relationship of  $0.5 \leq \Sigma s/S \leq 0.6$ . **In regard to claims 2, 4, 5 and 6**, Kotmel et al. teach a sheath 12 with a flexible tubular body 26 and a distal end 28 (see Figure 1). Sheath 12 is adapted to be placed over the fiberscope to form one insertable unit (see Figure 1). The distal end 28 of sheath 12 is provided with an inflatable cuff 34 which, as broadly as claimed, constitutes a bendable member connected to a distal end of the fiberscope that is bent with the plurality of components inserted therein. Similarly, the area of the sheath-encased fiberscope proximal to the inflatable cuff 34, as broadly as claimed, constitutes the narrowest portion of the fiberscope, with the diameters as set forth above.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beverly M. Flanagan whose telephone number is (703) 305-7202. The examiner can normally be reached on Mondays, Tuesdays and Thursdays.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C.M. Dvorak can be reached on (703) 308-0994. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

  
Beverly M. Flanagan  
Primary Examiner  
Art Unit 3739

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